

Several UK primary care organizations consider alginates to be interchangeable and differentiate products solely on costs; as such many have implemented alginate substitution programs. The aim of this study was to evaluate the validity of alginate substitution programs by conducting an economic evaluation of the costs and outcomes of the two leading prescribed alginates in the UK. **METHODS:** A decision-analytic model was constructed based on cohort of 3367 patients starting alginate monotherapy in primary care. Transition probabilities were derived from observed switching patterns during the observation period. The model was populated with previously reported health state utilities to derive quality-adjusted life years (QALYs). Costs were derived from treatment pathways examining 1st line of therapy / initial therapy, and subsequent therapies (eg, 2nd line, 3rd line, etc). Costs were calculated by summing all lines of treatment prescribed over one year including the costs of clinical consultations. The model calculated incremental cost-effectiveness between GA and Peptac after 2 lines and 5 lines of therapy. **RESULTS:** The average annual incremental cost difference between patients starting monotherapy GA and Peptac after 2-lines and 5-lines of therapy was £2.04 and £3.06, respectively. Disaggregation of costs indicated there was an increased proportion of a cost attributed to consultation visits for those starting on Peptac attributed to higher switching rates requiring a GP consultation. The incremental cost per quality adjusted life year for 2nd line and 5th line was £2887 and £5305 per QALY. In the sensitivity analysis the model was insensitive to changes in QoL scores attributed to failing therapy. The cost per QALY figures were moderately influenced by the duration of treatment failure before commencing 2nd line therapy. **CONCLUSIONS:** Based on aggregated costs of therapy and reduced switching rates Gaviscon Advance was cost-effective compared to Peptac. We suggest that all alginates are clinically not the same and that a broader range of costs and impact on patients should be taken into consideration when implementing therapeutic substitution programs.

PGI8

A COST-EFFECTIVENESS EVALUATION—RE-TREATMENT WITH PEGYLATED INTERFERON ALFA 2B PLUS RIBAVIRIN IN HEPATITIS C PATIENTS WHO HAVE PREVIOUSLY RECEIVED INTERFERON-BASED THERAPY AND FAILED TO ATTAIN A SUSTAINED VIROLOGICAL RESPONSE

Gibbons CJ¹, Morris J¹, O'Sullivan AK²

¹Schering-Plough, Welwyn Garden City, UK, ²3 Innovus, Medford, MA, USA

OBJECTIVES: Recent clinical trials have confirmed that hepatitis C patients who failed to attain a sustained virologic response (SVR) on interferon-based therapy (pegylated or non-pegylated) may still attain SVR if they are re-treated with pegylated interferon alfa 2b therapy in combination with ribavirin. On the basis of the international EPIC trial, a license has been granted for pegylated interferon alfa 2b and ribavirin to be used in this type of re-treatment. We developed a cost-effectiveness for this retreatment paradigm in Scotland, as part of our manufacturer submission to the Scottish Medicines Consortium. **METHODS:** Local costs were sourced and outcomes data from the EPIC trial were applied. Utilities and disease progression parameters were sourced from widely published and well-established sources including the British HTA report on hepatitis C. Our base case cost-effectiveness model compared the retreatment with no retreatment—this comparison reflects the current available treatment options in Scotland. **RESULTS:** Our base case model found retreatment with pegylated interferon alfa 2b plus ribavirin to be a cost-effective therapy com-

pared with no retreatment. The ICER was £11,389/QALY in the base case, however this cost-effectiveness measure varied strongly by the genotype of the virus patients are carrying as well as by the patient's prior experience on therapy (i.e. why they originally failed to attain SVR). Patients with less virulent strains of hepatitis C and whose prior treatment failed due to relapse or non-compliance represent the most cost-effective subgroup with ICERs below £9000/QALY. **CONCLUSIONS:** Aside from the differences in ICERs associated with the different sub-groups identified, ICERs remained below the cost-effectiveness threshold in the most typical treatment scenarios suggesting that the therapy will be a cost-effective addition to the Scottish treatment system.

PGI9

THE COST-EFFECTIVENESS OF HIGH-DOSE INTRAVENOUS ESOMEPRAZOLE IN PEPTIC ULCER BLEEDING: A DECISION-TREE MODEL WITH SPANISH COSTS AND NEW CLINICAL DATA

Barkun A¹, Adam V¹, Sung JY², Kuipers E³, Mössner J⁴, Jensen D⁵, Stuart RC⁶, Lau JY², Naucle E⁷, Kilhamn J⁸, Granstedt H⁷, Liljas B⁷, Lind T⁷

¹McGill University Health Centre, Montreal, QC, Canada, ²The Chinese University of Hong Kong, Hong Kong, China, ³Erasmus University Medical Center, Rotterdam, The Netherlands, ⁴University of Leipzig, Leipzig, Germany, ⁵David Geffen School of Medicine at UCLA, Los Angeles, CA, USA, ⁶Glasgow Royal Infirmary, Glasgow, UK, ⁷AstraZeneca R&D, Mölndal, Sweden, ⁸AstraZeneca R&D, Mölndal, Västra Götaland, Sweden

OBJECTIVES: Peptic ulcer bleeding (PUB) is a serious and life-threatening condition. Currently, no proton pump inhibitor has a label for being used in this setting. A recent multinational clinical trial (ClinicalTrials.gov identifier: NCT00251979) showed that high-dose intravenous esomeprazole (HIE), when administered after endoscopic haemostasis to patients with bleeding ulcers, is effective in preventing re-bleeding. **METHODS:** A decision-tree model was built, including patients with PUB following successful endoscopic haemostasis performed within 24 hours of initial presentation, comparing HIE (80 mg infusion, then 8 mg/h for 3 days) versus placebo, with both groups receiving oral esomeprazole 40 mg daily from days 4 to 30. The model adopted a 30-day time horizon, using a Spanish third-party payer perspective. The outcome was the rate of averted re-bleeds. Probabilities and lengths of hospital stay were provided from the recent trial. Hospital costs, including physician fees, and data for other model assumptions were retrieved from the literature. **RESULTS:** Re-bleed rates were 7.7% (n = 375) for HIE, and 13.6% (n = 389) for the placebo group (p < 0.01). The average costs per patient for the HIE and placebo strategies were €4924 and €4994, respectively. Thus, HIE was the dominant strategy (both more effective and less costly than placebo). Sensitivity analysis confirmed the robustness of the results, with the placebo strategy being less expensive only under specific circumstances (eg. when significantly varying re-bleed rates or dropping the hospitalization costs for patients with a re-bleed). **CONCLUSIONS:** Based on recent high-quality clinical trial data and modelling, the high-dose intravenous esomeprazole strategy was more effective and less costly than the placebo strategy.